

The Relationship Between Mindfulness and Happiness for Diverse College Students

Ava Galarza and Amberly Payne

Faculty Introduction

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The research conducted by Ms. Galarza and Ms. Payne was undertaken as part of their involvement in the Mindfulness, Spirituality, and Well-being Lab. The study utilized baseline data from a larger research project that aimed to evaluate the effectiveness of a mindfulness training program for college students. Participants were recruited as a class, with their instructors consenting to incorporate the training within the class time. Throughout the research process, the researchers gained proficiency in conducting basic statistical analyses, interpreting findings, and presenting results effectively. It is worth noting that this research experience provided the researchers with valuable insights into the practical aspects of conducting empirical studies and contributed to their academic and professional growth. Building upon their findings, Ms. Galarza and Ms. Payne developed an academic poster, which they presented at the Undergraduate Research Symposium at Sam Houston State University in April 2023. The outcomes of their study shed light on the significance of considering the increasing diversity within the college student population when designing research initiatives.

Abstract

Many schools, including higher education institutions, offer mindfulness interventions to foster the well-being of their students, as mindfulness and happiness have been found to be moderately correlated. The purpose of this study is to investigate whether that relationship holds for the diverse student body of a southern university in the United States. Cross-sectional correlational design was used to find the relationship between self-reported mindfulness and happiness, which were assessed through the Five Facet Mindfulness Questionnaire and Pemberton Happiness Index, respectively. Research findings provide sufficient cause to state that the complex relationship between mindfulness and happiness is significant among diverse college students, and is deserving of the resources required to nourish said relationship.

Editor's Note: The following article and poster are the results of a multi-level team collaboration—an undergraduate student, graduate student, and faculty member.

In recent years, the promotion of student well-being has become an important focus for schools, colleges, and universities. Well-being conceptualizations include physical, general, subjective, emotional, psychological, spiritual, and social well-being (Hervás & Vázquez, 2013). Other than physical well-being, all conceptualizations are the combination of varying levels of positive affect, carefreeness, life satisfaction, and meaning (Huta & Ryan, 2010).

Many educational institutions have implemented mindfulness interventions as a means to enhance student mental health and overall well-being (Dawson et al., 2019; Worsley et al., 2022). Mindfulness is defined as the non-judgmental awareness of the present moment (Kabat-Zinn, 2003). Empirical studies on mindfulness interventions conducted in various educational settings, ranging from K-12 schools to higher education, consistently indicate a positive association between mindfulness and well-being outcomes, such as decreased stress, anxiety, and depressive symptoms, as well as increased resilience, self-compassion, and overall life satisfaction (Dawson et al., 2019; Felver et al., 2016; Worsley et al., 2022).

However, it is important to note that the majority of these studies have focused on relatively homogeneous student populations (Waldron et al., 2018). Thus, the generalizability of the relationship between mindfulness and well-being to a diverse student body warrants further investigation. A well-being concept of life satisfaction has been found to be moderated by race/ethnicity (Wadsworth & Pendergast, 2021). A community sample of Hispanic, Asian, and African American adults revealed no significant differences of mindfulness (Shallcross & Spruill, 2018). But, because the sample did not have European Americans, differences between minoritized and majority individuals are not ruled out. Thus, the purpose of this study is to investigate whether that relationship holds for the diverse student body of a southern university in the United States. The following research questions guided the investigation:

- What is the level of correlation between mindfulness and well-being across different race/ethnicity groups?

- How do the self-reported levels of well-being compare across different race/ethnicity groups?
- How do the self-reported levels of mindfulness compare across different race/ethnicity groups?

Method

The study is designed as a cross-sectional correlational investigation.

Participants

The data of this investigation were collected from participants recruited for a larger project about testing the effectiveness of the Mindful Ambassador Program (Esat et al., 2021). The baseline data collected from 211 participants were used to perform the analysis. The participants were students taking classes in the College of Education (COE). The diversity in their majors and other demographic variables were consistent with the general population of students in the COE.

Measures

Students rated their levels of mindfulness through the Five Factor Mindfulness Questionnaire (FFMQ; Baer et al., 2008). The FFMQ is a 39-item questionnaire designed to measure one's tendency to be mindful in their daily life. Student answers are measured on a five-point Likert scale that ranges from 1 - *never or very rarely true* to 5 - *very often or always true*. The scale had high internal consistency and was shown to be differentially correlated with several other constructs related to the prediction of psychological symptoms and well-being (Baer et al., 2008).

Well-being was measured through the Pemberton Happiness Index (PHI; Hervás & Vázquez, 2013), an integrative measure of well-being that features 11 items associated with different domains of remembered well-being, including general, hedonic, and eudaimonic, and 10 items related to experienced well-being. Students rated their level of remembered well-being through use of the PHI's 11-point Likert scale, which ranges from 0 - *totally disagree* to 10 - *totally agree*. Students rated their level of experiential happiness in the form of yes/no questions. Cronbach's alpha coefficient of the scale was found to be 0.89, with sufficient convergent validity with other measures of well-being (Hervás & Vázquez, 2013).

Results

The relationship between self-reported mindfulness and well-being was a high moderate one, with $r = .61$ ($p = .001$). The Pearson correlation coefficients were lower for Asian American and Hispanic/Latino American students ($r = .41$, $r = 0.55$, respectively), and higher for European and African American students ($r = .71$, $r = 0.74$, respectively). There was not a significant difference across the racial/ethnic background groups with respect to well-being and mindfulness scores. The mean well-being score for the Asian American students was the lowest among the groups ($M = 6$; $SD = 1.4$) and the mean for the Hispanic/Latino students was the highest ($M = 7$; $SD = 1.6$). Again, Asian American students had the lowest mindfulness scores ($M = 113$; $SD = 17.6$) and African American students had the highest scores of mindfulness ($M = 127.6$; $SD = 17.5$).

Discussion

This study investigated whether the relationship between mindfulness and happiness holds for the diverse student body of a southern university in the United States across different race/ethnicity groups. There was a significant difference among the different groups' correlation coefficients for mindfulness and well-being. Though not statistically significant, patterns have been observed in the present dataset, with respect to both mindfulness and well-being scores, as Asian American students having the lowest scores. The low happiness levels of Asian American students is consistent with the literature (Dinn & Caldwell-Harris, 2016). Fear of failure in relation to collectivistic ideals is discussed as a possible factor in these results (Dinn & Caldwell-Harris, 2016).

A major limitation for this study is related to the self-report nature of both the FFMQ and PHI. Response bias is a concern because despite ensuring confidentiality, students may feel inclined to provide false or inaccurate information for the sake of perception.

To conclude, this study was pursued to further the relationship between mindfulness and well-being, with the ultimate objective of supporting college-aged students' well-being. It is sufficient to assert that the findings of the current study, along with the abundance of literature on the subject of mindfulness conducted in recent years, support the need for institutions of higher education to consider promoting mindfulness in

college campuses. The relationship between mindfulness and happiness in college students has proven to be robust, with opportunity for the field to continue investigating the variations between cultures.

Future studies should employ rigorous methodologies, including longitudinal designs and control groups, to examine the causal relationship between mindfulness and well-being outcomes. Furthermore, the development and evaluation of culturally appropriate mindfulness programs are essential to ensure inclusivity and maximize the effectiveness of interventions for diverse students. ■



Ava Galarza, Dr. Esat, Amberley Payne (from L to R)
presenting at the 2023 Undergraduate Research Symposium

References

- Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., ... & Williams, J. M. G. (2008). Construct validity of the five-facet mindfulness questionnaire in meditating and nonmeditating samples. *Assessment*, 15(3), 329-342. <https://doi.org/10.1177/1073191107313003>
- Dawson, A. F., Brown, W. W., Anderson, J., Datta, B., Donald, J. N., Hong, K., ... & Galante, J. (2019). Mindfulness Based Interventions for university students: A systematic review and meta-analysis of randomized controlled trials. *Applied Psychology: Health and Well-Being*. <https://doi.org/10.1111/aphw.12188>
- Dinn, A. A., & Caldwell-Harris, C. L. (2016). How collectivism and family control influence depressive symptoms in Asian American and European American college students. *Elektronik Sosyal Bilimler Dergisi*, 15(57). <https://doi.org/10.17755/esosder.09354>

- Esat, G., Rizvi, S., Mousa, C., Smoots, K., Shaw, E., Phillip, C. R., Vasquez, M., ... & Smith, B. H. (2021). Mindful Ambassador Program: An acceptable and feasible universal intervention for college students. *Journal of Yoga and Physiotherapy*, 8(5), 95-96. <https://doi.org/10.19080/jyp.2021.08.555748>
- Felver, J. C., Celis-de Hoyos, C. E., Tezanos, K., & Singh, N. N. (2016). A systematic review of mindfulness-based interventions for youth in school settings. *Mindfulness*, 7, 34-45.
- Hervás, G., & Vázquez, C. (2013). Construction and validation of a measure of integrative well-being in seven languages: The Pemberton Happiness Index. *Health and Quality of Life Outcomes*, 11 (66). <https://doi.org/10.1186/1477-7525-11-66>
- Huta, V., & Ryan, R. M. (2010). Pursuing pleasure or virtue: The differential and overlapping well-being benefits of hedonic and eudaimonic motives. *Journal of Happiness Studies*, 11, 735-762. <https://doi.org/10.1007/s10902-009-9171-4>
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156. <https://doi.org/10.1093/clipsy.bpg016>
- Shallcross, A. J., & Spruill, T. M. (2018). The protective role of mindfulness in the relationship between perceived discrimination and depression. *Mindfulness*, 9, 1100-1109.
- Wadsworth, T., & Pendergast, P. (2021). Race, ethnicity and subjective well-being: Exploring the disparities in life satisfaction among whites, latinx, and Asians. *International Journal of Wellbeing*, 11(2). <https://doi.org/10.5502/ijw.v11i2.1451>
- Waldron, E. M., Hong, S., Moskowitz, J. T., & Burnett-Zeigler, I. (2018). A systematic review of the demographic characteristics of participants in US-based randomized controlled trials of mindfulness-based interventions. *Mindfulness*, 9, 1671-1692. <https://doi.org/10.1007/s12671-018-0920-5>
- Worsley, J. D., Pennington, A., & Corcoran, R. (2022). Supporting mental health and wellbeing of university and college students: A systematic review of review-level evidence of interventions. *PLoS One*, 17(7), e0266725. <https://doi.org/10.1371/journal.pone.0266725>



INTRODUCTION

Mindfulness, drawn from traditional Buddhist practices, has recently become a popular concept in basic and applied Western psychology (Duncan et al., 2015). Mindfulness is awareness that arises through paying attention in a particular way, on purpose, in the present moment (Kabat-Zinn, 2003). Mindfulness has been found to relate to improved psychological functioning (Baer, 2003). Mindfulness meditation is generally defined to include "focusing one's attention in a nonjudgmental or accepting way on the experience occurring in the present moment" (Baer, Smith, & Allen, 2004). Happiness refers to one's state of well-being, both remembered and experiential. Remembered well-being is measured on multiple domains, including general, hedonic, eudaimonic, and social well-being (Hervás & Vázquez, 2013). General well-being refers to one's overall life satisfaction (Hervás & Vázquez, 2013). However, hedonic well-being emphasizes the significance of life satisfaction and affective aspects, whereas eudaimonic well-being is focused on optimal psychological functioning, which is dependent on the concept of self-fulfillment and includes the ideas of personal growth, purpose in life, and a sense of autonomy among others (Hervás & Vázquez, 2013). Social well-being is the appraisal of one's circumstance and functioning in society (Keyes, 1998). Together, these aspects form an integrative model for approaching the concept of happiness. The relationship between these two concepts, mindfulness and happiness, is a seemingly convoluted one, with the present study aiming to investigate the intricacies of such a complex connection.

METHODS

Data collected in 2018 focused on the mindfulness of approximately 200 students enrolled in a course featuring the Mindfulness Ambassador Program (MAP) at a medium-sized university in Texas. The MAP is a 10-week, 10-credit curriculum that was delivered through multiple courses taught in the College of Education. Participants were the students who provided baseline data for the effectiveness study of the Mindfulness Ambassador Program, which aimed to "foster the well-being of college students in a feasible and cost-effective way" (Esat et al., 2021). Demographic details are presented in Figure 1.

Figure 1.
Participant Demographic Details.

	Frequency/ Mean	Percent	Missing Frequency/ Percent
Age	23.20	-	241 36.1
Sex/Gender			
Female	164	49.7	119 36.1
Male	40	13.9	
Not Available/Other	1	3	
Ethnicity			
Hispanic/Latino	74	22.4	119 36.4
White/European	136	41.2	120 36.4
Race			
White/European	40	12.1	
Black or African American	31	9.4	
Asian	57	17.3	
Mixed/Other	7	2.1	
Hispanic/Latino	1	0.3	
Native			

Measures

Mindfulness was measured through the Five Factor Mindfulness Questionnaire (FFMQ). The FFMQ is a 39-item questionnaire that measures the tendency to be mindful in daily life (Baer et al., 2008). The data were collected at the beginning of the fall semester, with participants describing their level of mindfulness through the FFMQ. The questionnaire features a five-point Likert scale (1=never or very rarely true to 5=very often or always true). Mindfulness levels were specified according to scoring procedures featured alongside the FFMQ.

Well-being or happiness was measured through the use of the Pemberton Happiness Index (PHI). The PHI is an integrative measure of well-being that features 11 items related to different domains of remembered well-being including general, hedonic, eudaimonic, and social well-being, and 10 items related to experienced well-being (Hervás and Vázquez, 2013). Students were asked to rate their level of remembered well-being through an 11-point Likert scale (0=totally disagree to 10=totally agree). Students were also asked to rate their level of experiential happiness, which was answered in the form of yes/no.

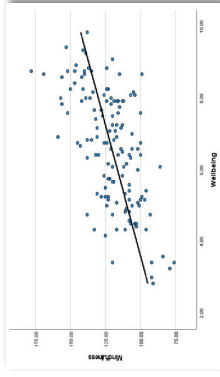
Procedure

Students were recruited through enrollment in MAP, which was integrated into lesson plans through "brief" interactive mindfulness lessons provided by peer facilitators" (Esat et al., 2021). The inclusion criteria were being enrolled in a class that featured MAP with an age of at least 18 years old.

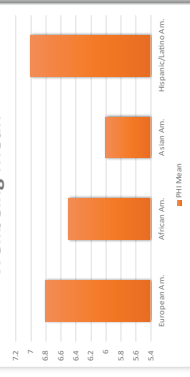
RESULTS

Levels of student mindfulness (FFMQ) was computed as a predictor for student well-being, or happiness, (PHI).

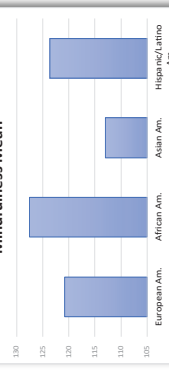
A cross-sectional correlational design was used to find the relationship between self-reported mindfulness and happiness, which was assessed through the Five Facet Mindfulness Questionnaire and Pemberton Happiness Index, respectively. The Pearson correlation between mindfulness and happiness was a high-moderate one with $r = .61$ ($p = .001$).



Wellbeing Mean



Mindfulness Mean



ABSTRACT

Many schools including higher education institutions offer mindfulness interventions to foster the wellbeing of their students because mindfulness and happiness have been found to be moderately correlated. The purpose of this study is to investigate whether the relationship holds for the diverse student body of a southern university in the United States. The sample size was 211 (49.7% female), with an age range of 18-42, 83.1% within the range of 18-26. Race/ethnicity rates of the participants were 22.4% Hispanic/Latino, 12.1% European, 17.3% Asian, 9.4% African American, and 2.5% other. Cross-sectional correlational design was used to find the relationship between self-reported mindfulness and happiness, which were assessed through the Five Facet Mindfulness Questionnaire and Pemberton Happiness Index, respectively. The Pearson correlation between mindfulness and happiness was a high-moderate one with $r = .61$ ($p = .001$). Given this finding, it is suggested that future research could investigate ways to increase mindfulness with the goal of increasing well-being amongst all college students.

DISCUSSION

The purpose of this study is to investigate whether that relationship holds for the diverse student body of a southern university in the United States. The Pearson correlation between mindfulness and happiness was a high-moderate one with $r = .61$ ($p = .001$). The correlation coefficients were lower for Asian American and Hispanic/Latino American students ($r = .41$, $r = 0.35$ respectively), and higher for European and African American students ($r = .71$, $r = 0.74$ respectively).

Further, although there was not a significant difference among the different racial/ethnic background groups with respect to happiness scores, Asian American students had the lowest scores ($M = 6$; $SD = 1.4$) and Hispanic/Latino students had the highest scores ($M = 7$; $SD = 1.6$). The low happiness scores of Asian American students are consistent with the literature (Dinn & Caldwell-Harris, 2016).

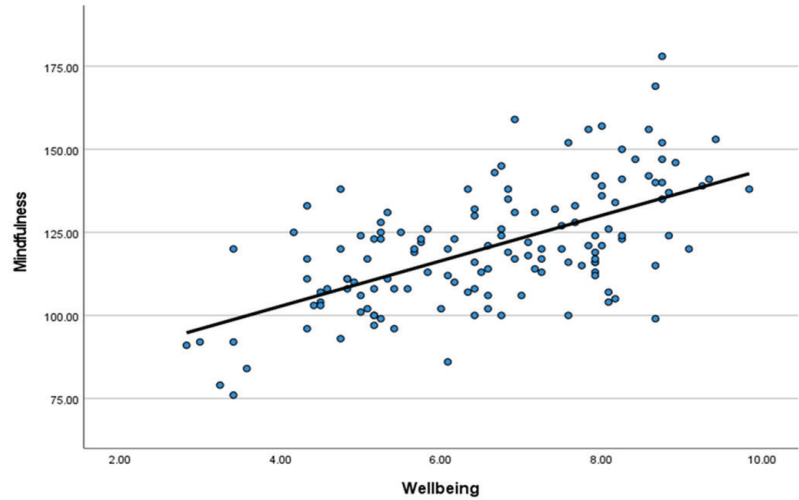
There were also differences (statistically not significant) among the different racial/ethnic background groups with respect to mindfulness. Asian American students had the lowest scores ($M = 113$; $SD = 17.6$) and African American students had the highest scores ($M = 127.6$; $SD = 17.5$).

A major limitation for this study is related to response bias. Due to the self-report nature of both the FFMQ and PHI, response bias is a concern. Despite ensuring confidentiality, students may feel inclined to provide false or inaccurate information for the sake of perception.

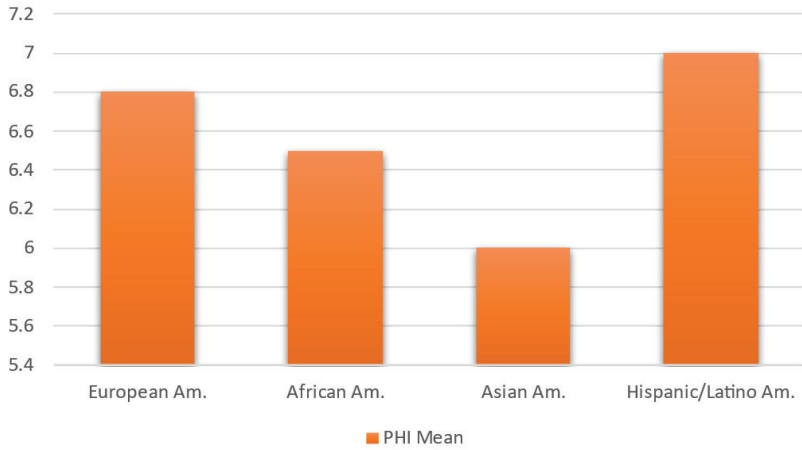
To conclude, this study was pursued to conceptualize the relationship between mindfulness and happiness, with the ultimate objective of supporting college-aged students' well-being. The relationship between mindfulness and happiness in college-aged students has proven to be robust and at the same time complex, with possible impact from cultural variables.

Editor's Note: For readability, the graphics are included below.

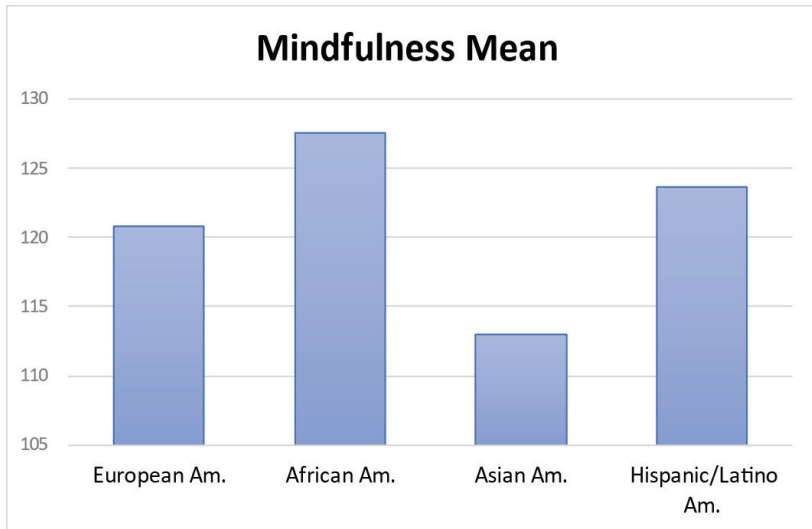
Participants	
The sample size was 211, with an age range of 18-42, 83.1% within the range of 18-26.	
Gender	
Female	49.7
Male	13.9
Other	.3
Race/Ethnicity	
Hispanic/Latinex American	22.4
Asian American	17.3
European American	12.1
African American	9.4
Other	2.4



Wellbeing Mean



Mindfulness Mean



Student Biography

Ava Galarza is a senior majoring in psychology at Sam Houston State University. She is involved in the Psychology Club and is a proud first-generation student. With a minor in education, the concept of mindfulness in the classroom piqued her interest. This interest led her to become affiliated with faculty in the Department of Psychology, who could provide insight into this fascinating intersection. Ava researched the relationship between mindfulness and happiness under the advisement of Dr. Esat, a professor in the Department of Psychology. Ava will graduate in the fall of 2023 and plans to pursue graduate studies thereafter. She hopes to continue her research on mindfulness and its role in education in graduate school.

Amberley Payne is a second-year graduate student in Experimental Psychology at Sam Houston State University. She is involved in three psychological research labs, including the Cognitive Research Lab; Mindfulness, Spirituality, and Well-being Lab; and the Behavioral Medicine Research Interventions and Outcomes Lab. Her primary research interests include resilience, cognitive function, and well-being, which helped lead to her involvement in mindfulness and well-being studies. Amberley will graduate in spring 2024 with her master's degree and will continue to pursue research as she continues with her education to earn her Ph.D.